Updating a Tradition

The New Yellow Shuttle Bus

The U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory is working with automotive industry leaders, the Department of Energy, Federal Transit Authority, the National Park Service and private industry to develop a low-floor, 18- to 32-passenger vehicle that uses alternative fuel and complies with the Americans with Disabilities Act (ADA).

A low-floor bus has the passenger area built low to the ground so steps are not required for entry; it also has an entry ramp that can be extended to accommodate passengers in wheelchairs. This is a critical and much anticipated improvement over the current generation of wheelchair-accessible shuttles.

Equally important, the team's efforts will result in a medium-duty community/transit shuttle with higher fuel efficiency and lower emissions that is priced about 45 percent below current low-floor buses.

The development of the prototype follows identification of a need by the National Park Service for a year-round transit vehicle that could be used for park operations. Market analysis indicates the vehicle will have broad application in municipal transit and private-sector transportation, thus increasing the probability that the prototype version

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might someday become a manufacturing reality.

In the first phase of the project, scheduled to be completed in fall 2003, program partners will develop an ADA-compliant, low-floor shuttle bus prototype with a natural gas powertrain. This prototype will have added amenities to support tourism in the national parks. The second phase, scheduled to be completed in 2004, will include unique body styling and increased amenities to enhance the visitor experience. This vehicle will provide the benefits of greater fuel economy and range, lower emissions and reduced noise and vibration.

Partners in this project with the INEEL include ASG Renaissance, Ruby Mountain, Greater Yellowstone/ Teton Clean Cities Coalition, Heart International, Hadley Products, and the National Park Service.

Other facts about the new yellow bus:

- The vehicle has rear-wheel drive and uses air suspension and kneeling suspension.
- The floor is flat with theater (stadium) seating which slopes 1.8 degrees to the front.
- The chassis has the capacity to carry the equivalent of 40 gasoline gallons of compressed gas.
- The CNG engine displaces 6.8L and will meet ultra-low emission vehicle standards with 0.5 parts per million nitrous oxide.
- The vehicle platform will be flexible enough to support several body designs and interior configurations.
- The vehicle can be manufactured with several drivetrains, including, but not limited to, compressed natural gas, liquid natural gas, propane and bio-diesel.

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